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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/696,989	10/26/2000	John Philip Holden	00216-519001	3295

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EXAMINER
SHIPSIDES, GEOFFREY P

ART UNIT	PAPER NUMBER
1732	10

DATE MAILED: 11/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-10

Office Action Summary	Applicati n No.	Applicant(s)	
	09/696,989	HOLDEN ET AL.	
	Examiner	Art Unit	
	Geoffrey P. Shipsides	1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 August 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11 and 15-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11 and 15-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *8* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I in Paper No. 9 is acknowledged.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-9 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,535,014 (Wright) in view of U.S. Patent No. 5,573,791 (Marcus), U.S. Patent No. 5,609,890 (Boucherie), U.S. Patent No. 6,292,973 B1 (Moskovich et al.), U.S. Patent No. 6,108,869 (Meessmann et al.), U.S. Patent No. 4,949,457 (Burout, III), U.S. Patent No. Des. 392,418 (Gray), U.S. Patent No. 5,027,511 (Miller) and Japanese Patent No. JP- 61261014-A (Yamada).

Wright teaches a method of molding multi-colored articles for personal grooming brushes and similar products (Abstract and Title; Column 1, lines 48-52). Wright teaches that the first shot is injected into a mold that delineates all of the stripes or pattern components of the first material (or color) and delineates a generally elongated interior spine piece (Column 2, lines 17-22). Wright further teaches that the second shot mold cavity provides the form of a pattern of greater surface area and the second shot material flows through and fills the gaps in the first hot piece resulting from the first

shot (Column 2, lines 32-37). Wright teaches the use of opposed mold tools to create mold cavities (Figure 4). Wright teaches a process that includes at least two shots.

With regard to claims 1-2, 15, Wright does not specifically teach that the method could be used to produce shaving razor handles, however, Wright does teach the use of his method for making articles for personal grooming brushes and similar products and a shaving razor handle would constitute a similar product as both toothbrushes and shaving razor handles have elongated handles and are for personal grooming. Even if Wright does not specifically teach the use of opposed mold tools to create mold cavities for each shot, it is well known to use opposed mold tools to create mold cavities that the molded product can easily be removed from by separating the mold tools.

Shaving razor handles are well known in the art. Miller, Gray, and Burout, III all teach shaving razor handles that include gripping portions. Miller teaches a shaving razor handle with an inner core of brass (Column 2, line 12) and an outer layer formed with an array of soft, tactile, spaced portions that give the composite handle a user-friendly gripping structure for the razor user (Abstract; Figures). Gray teaches a decorative shaving razor handle that has different regions of different color (Figures). Burout, III teaches a composite razor handle having a rigid inner core of thermoplastic material and a moldable flexible resilient covering layer (Abstract and Figures). It is further well known in the art to use elastomeric materials to form grip portions on products.

Marcus teaches a method speeding up the production rate of a molded article by molding the article in a series of layers in a series of injection molding stations so that

each layer can be cooled in a relatively short period of time thereby optimizing production rates. Marcus further teaches that each layer can be of the same or different resins. (Column 1, lines 51-60).

Meessmann et al. teaches a tooth brush handle that has an elongated handle with bristles disposed at one end formed of a semi-rigid material and a softer material that is formed onto the handle to provide a soft grip for the user (Abstract).

Moskovich et al. and Boucherie also teach toothbrush handles made of various layers of materials to give decoration and user grip. Boucherie teaches opposed mold tools to create mold cavities.

Yamada also teaches a multicolored handle manufactured in a multiple shot method.

It would have been obvious to one having ordinary skill in the art at the time of invention to use the method as taught by Wright to mold a shaving razor handle, such handles being well known in the art, in order to produce a decorated shaving razor handle with a decorated handle that would attract consumer attention and improve sales. One having ordinary skill in the art at the time of invention would have been motivated to use the method as taught by Wright to mold a razor handle as toothbrush handles and shaving razor handles are analogous structures and have analogous uses as hand held consumer articles. It would have been further obvious to one having ordinary skill in the art at the time of invention to further modify the process by building up successive thin layers to speed up the cooling time and thus optimizing the production rate as taught by Marcus. It would have been further obvious to one having

ordinary skill in the art at the time of invention to make the last shot of an elastomeric material to provide an elastomeric grip portion (as are well known for use in making grip portions and as Moskovich et al., Meessmann et al., Miller, Gray, and Burout, III all teach the use of grip portions on toothbrush handles or shaving razor handles) on to the outside of the shaving razor handle in order to provide a shaving razor handle that provides a good grip. It would have been clear from the teachings of Marcus that the exact number of shots to form the razor handle or toothbrush handle would be dependent upon the thickness of the finished product. It is clear that the number of shots is a result effective variable based upon the materials used and the dimensions of the razor handle and it would have been obvious to one having ordinary skill in the art at the time of invention to have determined the exact number of shots required through routine experimentation. It would have been further obvious to one having ordinary skill in the art at the time of invention to use opposed mold tools to create each of the mold cavities as taught by Wright and Boucherie and is well known in the art in order to ensure proper removal for each formed part.

With regard to claim 3, it is clear that the color of the internal layers of a razor handle would not be exposed to the outside environment, and thus would not require specific pigmentation, where as the outer layers would be exposed and thus it would have been obvious to one having ordinary skill in the art at the time of invention to decorate the outer portions by providing a pigmentation to the outer layers of the razor handle but not to the internal layers of a razor handle.

With regard to claims 16 and 17, razor handles with various decorative features are well known in the art and one well-known decorative feature for consumer articles is a transparent appearance. It would have been obvious to one having ordinary skill in the art at the time of invention to make a razor handle with a transparent appearance by molding transparent resin for the molding of the main part of the razor handle body.

With regard to claims 4 and 5, Boucherie teaches a similar molding process with the use of a molding machine for molding toothbrushes (Title and Abstract). Boucherie teaches a method of molding toothbrush bodies from at least two different materials (Column 1, lines 63-64). Boucherie teaches a molding machine where each mold cavity is defined by relatively movable mold parts (Column 2, lines 9-10). Boucherie teaches the use of a rotating toothbrush carrier that carries the unfinished toothbrush parts from station to station where subsequent insert molding processes are performed (Figures). Boucherie teaches that the mold insert parts 28 are engaged in the recesses 26 of the mold blocks 20, and the mold cavities 20a are closed by lowering corresponding movable mold parts (not shown) until they abut the stationary mold blocks 20 (Column 4, lines 15-20). It would have been obvious to one having ordinary skill in the art at the time of invention to use the method of successive shot molding as taught by Wright in the molding apparatus as taught by Boucherie in order to form shaving razor handles in a single apparatus that automatically moves the each molded part to the next shot station.

With regard to claims 6-8, Boucherie teaches an apparatus that molds multiple toothbrushes in each station (Figures). It would have been obvious to one having

ordinary skill in the art at the time of invention to mold multiple parts in each shot as taught by Boucherie in the method as taught by Wright in order to increase the number of shaving razor handles produced per production cycle.

With regard to claims 10 and 11, Wright does not specifically teach the molding of an inner core with a hole passing therethrough for passing molten plastic through in the molding of the second shot. Yamada and Meessmann et al., however, do teach the molding of handles of multiple materials where a first formed part has a hole therethrough in which material passes through. Yamada teaches a decorative handle of multiple colors where a first part is molded with holes passing therethrough and the molding of material through these holes to form the second colored section at different places along the body of the handle (Figures 6 and 8). The method as taught by Yamada constitutes the placing of a first formed part with through holes into a mold where material passes from a first side surface of the first formed part to a second side surface of the first formed part. The first side of the first formed part of Yamada is held against the mold surface while plastic material flows to the second side. Meessmann et al. also teaches a first formed part with a through hole formed (Figures 7 and 9). Meessmann et al. teaches that the handle member 12 is generally manufactured of a thermoplastic material, such as polypropylene (Column 3, lines 45-46). Meessmann et al. further teaches that an elongated opening 20 is provided at the opposite end of the handle member 12 from that of the bristles 14 and, as with the slotted openings 18, the material from the gripping element 16 is injected into the slotted opening 20 and aids in retaining that portion of the gripping element 16 onto the handle member 12 (Column 3,

lines 62-67). The gripping element is formed on sides of the toothbrush handle (Figure 3). Wright also does not exclude the use of a through hole in the production of a multi-colored handle and the drawing of Figure 4 seems to teach the use of a through hole in the molding of different colored sections of the handle. It would have been obvious to one having ordinary skill in the art at the time of invention to provide a first molded part as taught by Wright with a through hole or through holes as taught by Meessmann et al. and Yamada in order to allow for the passage of the second shot material into separated surface area portions of the handle body without the use of multiple injection points. It would have been further obvious to one having ordinary skill in the art to do this in order to provide an interlocking relationship between the two different molded portions of the handle. It would have been further obvious to one having ordinary skill in the art at the time of invention to inject the material at a position along the handle where the through hole exists in order to facilitate the passage of material through the through hole as taught by Yamada. It would have been further obvious to one having ordinary skill in the art at the time of invention to have a mold tool that holds the first side of the first molded part against the point of injection to further ensure the passage of the material through the through hole.

With regard to claim 9, it is well known in the art of shaving razor handles to have handles that disconnect from disposable shaving razor assemblies. It is further well known in the art that such shaving razor handles have handle connection components to facilitate the connection of the shaving razor handle to a shaving razor assembly. It is further well known in the art to have a shaving razor handle end having a

complementary shape to the shape of a connection component in order to facilitate the connection and it is well known in the art of molding to have a shaped mold tool that is complementary to the shape of the molded product. It would have been obvious to one having ordinary skill in the art at the time of invention to have the end of the handle produced by the method as taught by Wright to have a end portion designed to have a shape complementary to the shape of a connection component as is well known in the art and to connect the connection component to the shaving razor handle after the removal of the shaving razor handle from the molding tool in order to easily mold the handle portion separate from the complex design of the connection component and have the connection component easily connect to the shaving razor handle. It would have been further obvious to one having ordinary skill in the art at the time of invention to have the engagement member portion of the molding assembly as taught by Boucherie be in a shape complementary to the shape of the end of the handle so as to produce a shaped end of the handle that would connect well with the connection component as is well known in the art and thus an engagement member of a similar shape to that of the connection component so as to ensure that the connection component will make a strong connection to the shaving razor handle.

4. Claims 1 and 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,535,014 (Wright) in view of U.S. Patent No. 5,609,890 (Boucherie), U.S. Patent No. 6,292,973 B1 (Moskovich et al.), U.S. Patent No. 6,108,869 (Meessmann et al.), U.S. Patent No. 4,949,457 (Burout, III), U.S. Patent No.

Des. 392,418 (Gray), U.S. Patent No. 5,027,511 (Miller) and Japanese Patent No. JP-61261014-A (Yamada).

Wright teaches a method of molding multi-colored articles for personal grooming brushes and similar products (Abstract and Title; Column 1, lines 48-52). Wright teaches that the first shot is injected into a mold that delineates all of the stripes or pattern components of the first material (or color) and delineates a generally elongated interior spine piece (Column 2, lines 17-22). Wright further teaches that the second shot mold cavity provides the form of a pattern of greater surface area and the second shot material flows through and fills the gaps in the first hot piece resulting from the first shot (Column 2, lines 32-37). Wright teaches the use of opposed mold tools to create mold cavities (Figure 4). Wright teaches a process that includes at least two shots.

With regard to claim 1, Wright does not specifically teach that the method could be used to produce shaving razor handles, however, Wright does teach the use of his method for making articles for personal grooming brushes and similar products and a shaving razor handle would constitute a similar product as both toothbrushes and shaving razor handles have elongated handles and are for personal grooming. Even if Wright does not specifically teach the use of opposed mold tools to create mold cavities for each shot, it is well known to use opposed mold tools to create mold cavities that the molded product can easily be removed from by separating the mold tools.

Shaving razor handles are well known in the art. Miller, Gray, and Burout, III all teach shaving razor handles that include gripping portions. Miller teaches a shaving razor handle with an inner core of brass (Column 2, line 12) and an outer layer formed

with an array of soft, tactile, spaced portions that give the composite handle a user-friendly gripping structure for the razor user (Abstract; Figures). Gray teaches a decorative shaving razor handle that has different regions of different color (Figures). Burout, III teaches a composite razor handle having a rigid inner core of thermoplastic material and a moldable flexible resilient covering layer (Abstract and Figures). It is further well known in the art to use elastomeric materials to form grip portions on products.

Meessmann et al. teaches a tooth brush handle that has an elongated handle with bristles disposed at one end formed of a semi-rigid material and a softer material that is formed onto the handle to provide a soft grip for the user (Abstract).

Moskovich et al. and Boucherie also teach toothbrush handles made of various layers of materials to give decoration and user grip. Boucherie teaches opposed mold tools to create mold cavities.

Yamada also teaches a multicolored handle manufactured in a multiple shot method.

It would have been obvious to one having ordinary skill in the art at the time of invention to use the method as taught by Wright to mold a shaving razor handle, such handles being well known in the art, in order to produce a decorated shaving razor handle with a decorated handle that would attract consumer attention and improve sales. One having ordinary skill in the art at the time of invention would have been motivated to use the method as taught by Wright to mold a razor handle as toothbrush handles and shaving razor handles are analogous structures and have analogous uses

as hand held consumer articles. Shaving handles are know in the art to possess internal rigid parts that are not exposed as taught by Miller. It would have been further obvious to one having ordinary skill in the art at the time of invention to use a three shot method as anticipated by Wright to impart an internal more rigid part as taught by Miller and a last shot of an elastomeric material to provide an elastomeric grip portion (as are well known for use in making grip portions and as Moskovich et al., Meessmann et al., Miller, Gray, and Burout, III all teach the use of grip portions on toothbrush handles or shaving razor handles) on to the outside of the shaving razor handle in order to provide a shaving razor handle that provides a good grip and has a rigid internal member as taught by Miller. It would have been further obvious to one having ordinary skill in the art at the time of invention to use opposed mold tools to create each of the mold cavities as taught by Wright and Boucherie and is well known in the art in order to ensure proper removal for each formed part.

With regard to claims 4 and 5, Boucherie teaches a similar molding process with the use of a molding machine for molding toothbrushes (Title and Abstract). Boucherie teaches a method of molding toothbrush bodies from at least two different materials (Column 1, lines 63-64). Boucherie teaches a molding machine where each mold cavity is defined by relatively movable mold parts (Column 2, lines 9-10). Boucherie teaches the use of a rotating toothbrush carrier that carries the unfinished toothbrush parts from station to station where subsequent insert molding processes are performed (Figures). Boucherie teaches that the mold insert parts 28 are engaged in the recesses 26 of the mold blocks 20, and the mold cavities 20a are closed by lowering corresponding

movable mold parts (not shown) until they abut the stationary mold blocks 20 (Column 4, lines 15-20). It would have been obvious to one having ordinary skill in the art at the time of invention to use the method of successive shot molding as taught by Wright in the molding apparatus as taught by Boucherie in order to form shaving razor handles in a single apparatus that automatically moves the each molded part to the next shot station.

With regard to claims 6-8, Boucherie teaches an apparatus that molds multiple toothbrushes in each station (Figures). It would have been obvious to one having ordinary skill in the art at the time of invention to mold multiple parts in each shot as taught by Boucherie in the method as taught by Wright in order to increase the number of shaving razor handles produced per production cycle.

With regard to claims 10 and 11, Wright does not specifically teach the molding of an inner core with a hole passing therethrough for passing molten plastic through in the molding of the second shot. Yamada and Meessmann et al., however, do teach the molding of handles of multiple materials where a first formed part has a hole therethrough in which material passes through. Yamada teaches a decorative handle of multiple colors where a first part is molded with holes passing therethrough and the molding of material through these holes to form the second colored section at different places along the body of the handle (Figures 6 and 8). The method as taught by Yamada constitutes the placing of a first formed part with through holes into a mold where material passes from a first side surface of the first formed part to a second side surface of the first formed part. The first side of the first formed part of Yamada is held

against the mold surface while plastic material flows to the second side. Meessmann et al. also teaches a first formed part with a through hole formed (Figures 7 and 9). Meessmann et al. teaches that the handle member 12 is generally manufactured of a thermoplastic material, such as polypropylene (Column 3, lines 45-46). Meessmann et al. further teaches that an elongated opening 20 is provided at the opposite end of the handle member 12 from that of the bristles 14 and, as with the slotted openings 18, the material from the gripping element 16 is injected into the slotted opening 20 and aids in retaining that portion of the gripping element 16 onto the handle member 12 (Column 3, lines 62-67). The gripping element is formed on sides of the toothbrush handle (Figure 3). Wright also does not exclude the use of a through hole in the production of a multi-colored handle and the drawing of Figure 4 seems to teach the use of a through hole in the molding of different colored sections of the handle. It would have been obvious to one having ordinary skill in the art at the time of invention to provide a first molded part as taught by Wright with a through hole or through holes as taught by Meessmann et al. and Yamada in order to allow for the passage of the second shot material into separated surface area portions of the handle body without the use of multiple injection points. It would have been further obvious to one having ordinary skill in the art to do this in order to provide an interlocking relationship between the two different molded portions of the handle. It would have been further obvious to one having ordinary skill in the art at the time of invention to inject the material at a position along the handle where the through hole exists in order to facilitate the passage of material through the through hole as taught by Yamada. It would have been further obvious to one having ordinary

skill in the art at the time of invention to have a mold tool that holds the first side of the first molded part against the point of injection to further ensure the passage of the material through the through hole.

With regard to claim 9, it is well known in the art of shaving razor handles to have handles that disconnect from disposable shaving razor assemblies. It is further well known in the art that such shaving razor handles have handle connection components to facilitate the connection of the shaving razor handle to a shaving razor assembly. It is further well known in the art to have a shaving razor handle end having a complementary shape to the shape of a connection component in order to facilitate the connection and it is well known in the art of molding to have a shaped mold tool that is complementary to the shape of the molded product. It would have been obvious to one having ordinary skill in the art at the time of invention to have the end of the handle produced by the method as taught by Wright to have a end portion designed to have a shape complementary to the shape of a connection component as is well known in the art and to connect the connection component to the shaving razor handle after the removal of the shaving razor handle from the molding tool in order to easily mold the handle portion separate from the complex design of the connection component and have the connection component easily connect to the shaving razor handle. It would have been further obvious to one having ordinary skill in the art at the time of invention to have the engagement member portion of the molding assembly as taught by Boucherie be in a shape complementary to the shape of the end of the handle so as to produce a shaped end of the handle that would connect well with the connection

component as is well known in the art and thus an engagement member of a similar shape to that of the connection component so as to ensure that the connection component will make a strong connection to the shaving razor handle.

Response to Arguments

5. Applicant's arguments with respect to claims 1-11 and 15-17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey P. Shipsides whose telephone number is 703-306-0311. The examiner can normally be reached on Monday - Friday 9 AM till 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jan H Silbaugh can be reached on 703-308-3829. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Geoffrey P. Shipsides/gps
November 18, 2002

JAN H. SILBAUGH
SUPERVISORY PATENT EXAMINER
ART UNIT 1732

11/18/02